MINERAL RESOURCES TASMANIA

Laboratory Report LJN2020-051

PETROPHYSICAL TESTS:

MATHINNA AND CLEVELAND DDH

An unpublished Mineral Resources Tasmania Report for:

Mark Duffett, MRT

By: T Coyte, R King and R Bottrill

Dated: 26 June 2020

Mineral Resources Tasmania
Department of State Growth

Tasmanian Government

Introduction

Seven rock samples were collected from Mathinna and Cleveland Drill Cores by M Duffett, for physical property measurements; with details listed in Table 1 below.

Table 1: Sample Details.

Reg#	Depth (m)	Drill hole ID/ Name	Sample Description
L301420	149.7	88802 MDD007	siltstone
L301421	200.1	88802 MDD007	siltstone
L301422	249.8	88802 MDD007	siltstone
L301423	299.95	88802 MDD007	siltstone
L301424	40.2	82797 C1112	sandstone and siltstone
L301425	80.45	82797 C1112	sandstone and breccia
L301426	100.3	88802 MDD007	siltstone

SAMPLE DESCRIPTION

The samples consisted of coherent diamond drill core, from Mathinna and Cleveland in Tasmania. Photos of each sample are listed below (Photo 1-7).

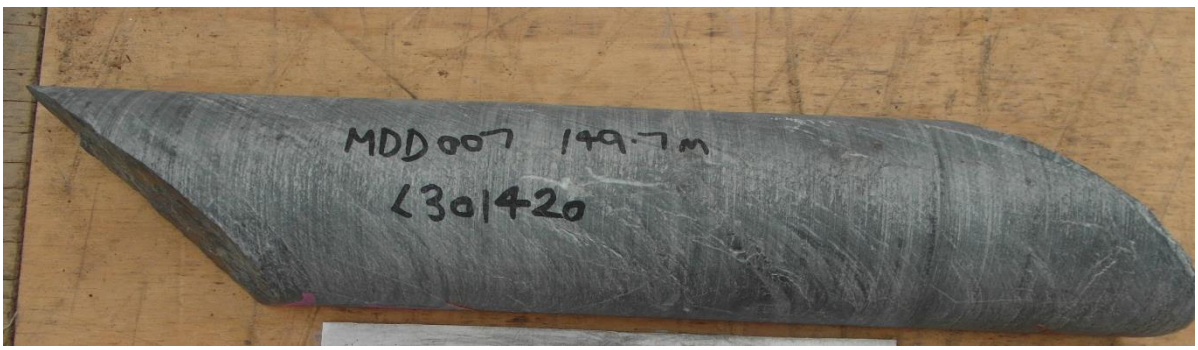

Photo 1: Sample L301420 - siltstone. FOV: about 450 mm

Photo 2: Sample L301421 - siltstone. FOV: about 400 mm

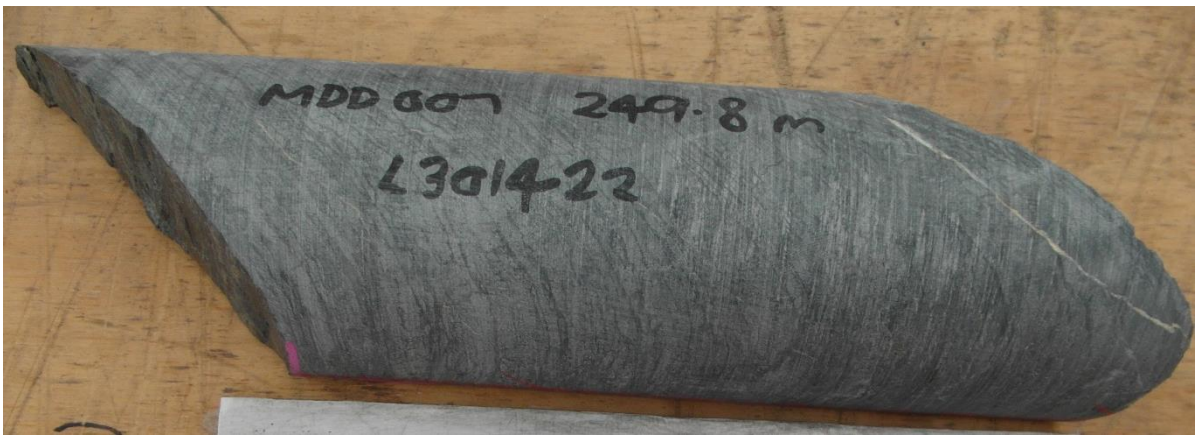

Photo 3: Sample L301422 - siltstone. FOV: about 400 mm

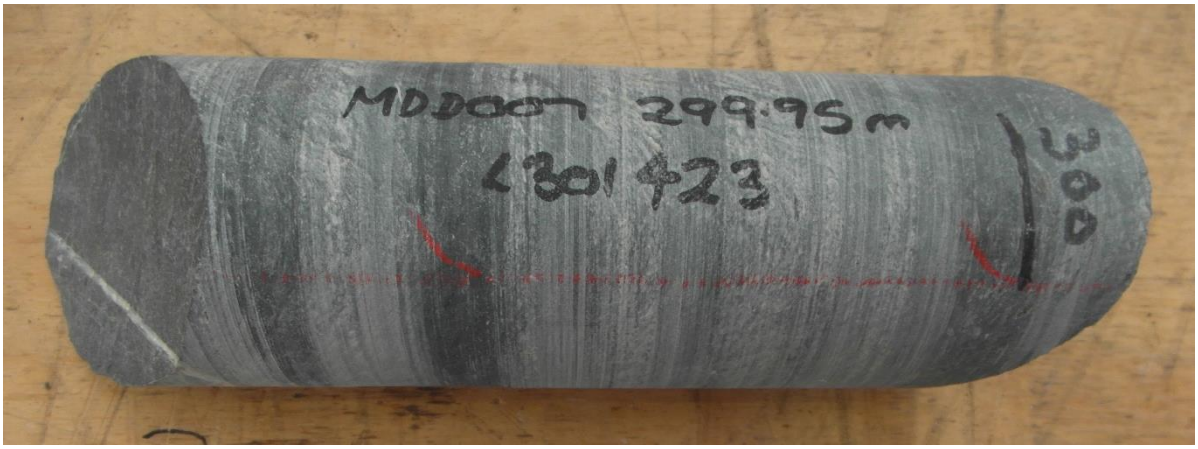

Photo 4: Sample L301423 - siltstone. FOV: about 400 mm

Photo 5: Sample L301424 – sandstone and siltstone. FOV: about 400 mm

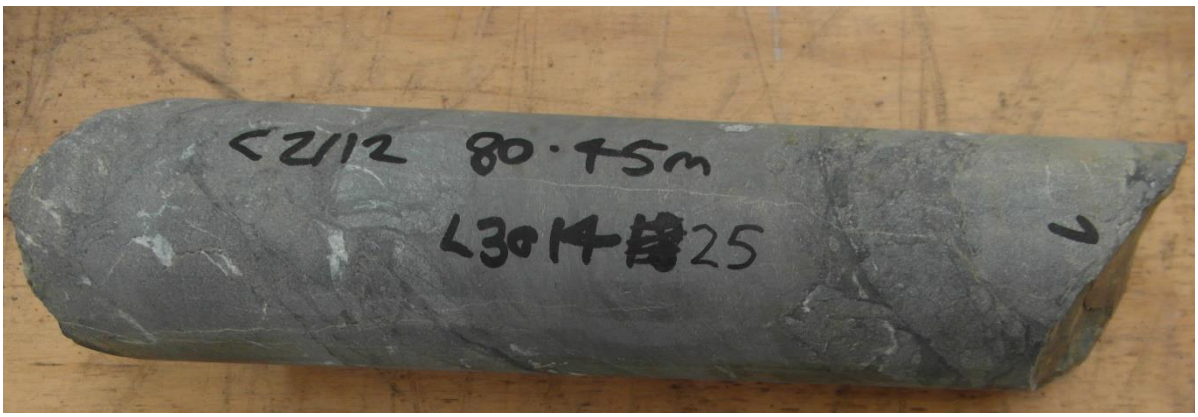

Photo 6: Sample L301425 - sandstone and breccia. FOV: about 450 mm

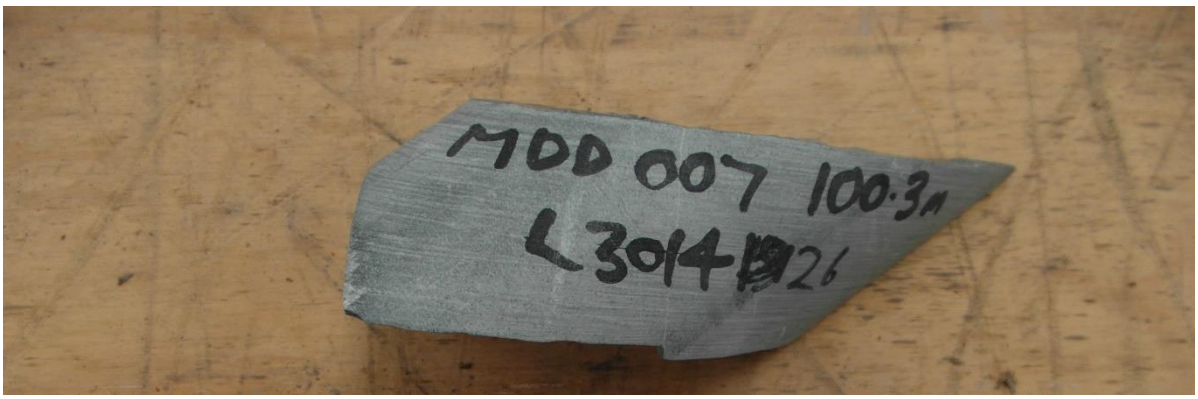

Photo 7: Sample L301426 - siltstone. FOV: about 300 mm

LABORATORY TESTS

The samples were soaked for a minimum of 48 hours and weighed in water, and then wet in air. Samples were dried in a 90°C oven for a minimum of 12 hours then weighed dry. The wet porosity and density (specific gravity) was determined by standard gravimetric methods in the Mineral Resources Tasmania (MRT) Core Library, with an electronic balance accurate to 0.1g. The relative accuracy of the results is ~1% for specific gravity and ~5% for wet porosity. The summary of results is shown in Table 2 and full details listed in Appendix 1.

Table 2: Summary of Specific Gravity and Wet Porosity

Sample ID	Drill hole ID/ Name	Rocktype	Dry bulk SG	Wet bulk SG	Wet porosity (%)
L301420	88802 MDD007	siltstone	2.76	2.77	0.63
L301421	88802 MDD007	siltstone	2.77	2.77	0.26
L301422	88802 MDD007	siltstone	2.76	2.77	0.64
L301423	88802 MDD007	siltstone	2.77	2.77	0.25
L301424	82797 C1112	sandstone and siltstone	2.69	2.73	4.46
L301425	82797 C1112	sandstone and breccia	2.72	2.73	1.42
L301426	88802 MDD007	siltstone	2.75	2.76	0.98

R S Bottrill
MINERALOGIST-PETROLOGIST

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LABORATORY ASSISTANTS

Appendix 1: Laboratory Report – Physical Property analyses

Client: M Duffett

Analysis: Physical Properties

Method: Gravimetric S.G. and Porosity

Location: Mathinna and Cleveland

Job No.: LJN2020-051

Date: 11/6/2020

Results

Sample ID	Dry Weight in Air (g)	Sub-sat Wt in water (g)	Sat. Wt. in Air (g)	Dry bulk SG	Wet bulk SG	Wet porosity (%)
L301424	476.1	306.9	484.0	2.69	2.73	4.46
L301425	844.5	538.2	848.9	2.72	2.73	1.42
L301426	168.9	108.1	169.5	2.75	2.76	0.98
L301420	1052.6	673.9	1055.0	2.76	2.77	0.63
L301421	1578.6	1009.7	1580.1	2.77	2.77	0.26
L301422	606.1	387.9	607.5	2.76	2.77	0.64
L301423	1209.0	773.2	1210.1	2.77	2.77	0.25

Analyst: R. King

Date: 11/6/2020